

## **ABSTRACT OF THE DISCLOSURE**

The invention provides an apparatus for measuring the magnetic field strength between the magnet arrays of an insertion device in an X-ray generating system comprising a magnetic field strength sensor that produces an output signal, three stages for positioning the sensor along the X, Y and Z axes of the insertion device, means for controlling positions of the stages and information storage means for reading the output signal operably connected to the sensor. The apparatus eliminates the need for a dedicated measurement facility by mounting guide means for the long (Z-) axis directly to the insertion device. This long-axis guide means can be permanently or temporarily mounted to the insertion device. The remainder of the measurement apparatus may then be transferred onto the long-axis guide means while measurements and, if necessary, adjustments are made. The apparatus is compact, allowing greater access to magnet arrays for adjustment than existing systems.